REMARKS



The present amendment is submitted in response to the Office Action dated May 3, 2006, which set a three-month period for response, making this amendment due by August 3, 2006.

Claims 1-10 are pending in this application.

In the Office Action, claims 1-10 were objected to for various informalities. Claim 3 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1 and 3 and 7-9 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,935,612 to McCombs et al. Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCombs et al in view of U.S. Patent No. 5,529,841 to Neihof. Claims 4-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over McCombs et al in view of Neihof as applied to claim 2, and further in view of engineering expedient. Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over McCombs in view of U.S. Patent No. 5,718,264 to Sturman.

In the present amendment, the specification has been amended to add standard headings and to delete reference to the claims.

The claims were amended to address the objection.

However, with regard to the rejection of claim 3 under Section 112, second paragraph, the Applicants respectfully disagree with the basis for this rejection. Claim 3 recites specifically that the first and/or second elastomer are made of Viton, which is a well-known type of fluoroelastomer in the relevant art. MPEP 2173.05(u) provides that "the presence of a trademark or trade name in a claim is not, per se, improper under 35 U.S.C. 112, second paragraph... If a trademark or trade name appears in a claim and is not intended as a limitation in the claim, the question of why it is in the claim should be addressed. Does its presence in the claim cause confusion as to the scope of the claim?" (emphasis added).

Here, the limitation that the first and/or second elastomers are made of Viton clearly is an intended limitation to define and limit the composition of the recited elastomers. Moreover, this recitation/limitation does NOT cause confusion as to the scope of the claim, since, as noted above, Viton is a wellknown and readily available fluoroelastomer. The Applicants therefore respectfully request withdrawal of this rejection of claim 3.

To more clearly define the present invention over the cited references, claim 1 was amended to add the features of claims 2, 4, and 9. Claim 2 and 4 have been canceled, and claim 9 was amended to define only that the injection molding process used is a two-component injection molding method.

The Applicants respectfully submit that amended claim 1 defines a patentably distinct set of features that is neither shown nor suggested by the cited references, whether viewed alone or in the proposed combinations.

Amended claim 1 now also defines that "the first elastomer and/or the second elastomer are composed of a fluorosilicone and a silicone, wherein the second elastomer includes a higher proportion of fluorosilicone than the first

elastomer, and wherein the sealing element (40) and the damping element (41) are integrally extruded on the metallic main body (36) of the valve body (32) using injection molding".

The primary reference to McCombs discloses a magnetic valve with a sealing element 22 and a damping element 38 formed as an O-ring. The sealing element 22 is made from an ethylene-propylene-elastomer (BUNA, see column 2, line 40), while the damping element 38 is made from a fluoroelastomer (Viton, see column 2, lines 59-60). The ethylene-propylene material has the disadvantage that it is not fuel resistance, so that is cannot be used in a tank ventilation valve. The use of fluoroelastomer is a disadvantage for the damping effect, since it is hard with lower temperatures and therefore has bad damping properties.

The subject matter of amended claim 1 differs from that of McCombs in that the sealing element and the damping element comprise a mixture of fluorosilicone and silicon, whereby the damping element has a higher portion of fluorosilicone than the damping element and the sealing element and damping element is injected onto the metallic base body.

These different features solve the object of providing an alternative design, which is formed optimally and cost-effectively with regard to fuel and temperature resistance, damping, elasticity, and adhesion.

In contrast to McCombs, the present invention provides a first step, in which the sealing element and the damping element are injected in a single method step by means of injection molding onto the metallic base body. In a second step, both materials, Buna and Viton are replaced by a single material, specifically, fluorosilicone, in order to achieve an adequate fuel resistance of the components. A third step provides mixing silicon with the fluorosilicone of the sealing element and damping element, in order to achieve an adequate adhesion of the injection molded material on the metallic base body. A fourth step involves forming the fluorosilicone portion in the damping element to be greater than in the sealing element, in order to provide the damping element a greater fuel resistance as the sealing element, since the damping element is placed in a more intense flow of the fuel than the sealing element.

Because amended claim 1 discloses features that are not shown by McCombs, the rejection under Section 102 must be withdrawn. Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984).

With regard to the rejection under Section 103 over the combination of McCombs and the patent to Neihof, the Applicants respectfully submit that the practitioner who is concerned with the development of a valve would not consult a reference in the area of analysis apparatus for a ship's fire extinguishing system. If the practitioner were to employ the teachings of Neihof, he still would not be lead to the end result of replacing the materials of the sealing element and damping element in McCombs with the materials of the present invention, since

the practitioner would only obtain from Neihof that the permeability of a specialized layer with regard to hydrogen sulfide is adjustable by using a mixture of fluorosilicone and silicon. The necessary fuel resistance for the sealing and damping element, however, is completely different than the permeability requirements with regard to hydrogen sulfide.

Therefore, the Applicants respectfully submit that the practitioner would not be lead to the present invention as defined in amended claim 1 by combining the McCombs and Neihof, since neither reference discloses or suggests the above features of amended claim 1. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 221 USPQ 929, 932, 933 (Fed. Cir. 1984). Here, the cited art fails to provide any such suggestion or incentive.

For the reasons set forth above, the Applicants respectfully submit that claims 1, 3, 5-8, and 10 are patentable over the cited art. The Applicants further request withdrawal of the rejections under 35 U.S.C. 102 and 103 and reconsideration of the claims as herein amended.

Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully submitted,

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